

Determination of NEPA Adequacy (DNA)

**Koch North Alger 4 Well DNA
DOI-BLM-UT-G010-2015-0108-DNA**

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Chapter 1. Determination of NEPA Adequacy (DNA)

DOI-BLM-UT-G010-2015-0108-DNA

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U.S. Department of the Interior
Bureau of Land Management

OFFICE: Vernal Field Office:LL00UTG010

CASEFILE/PROJECT NUMBER: DOI-BLM-UT-G010-2015-0108-DNA

PROPOSED ACTION TITLE/TYPE: Koch Exploration Company's LLC Drilling of 4 Gas Wells on a Single Well Pad

LOCATION/LEGAL DESCRIPTION: T10S R19E SEC 27

APPLICANT: Koch Exploration Company LLC

A. Description of Proposed Action and any applicable mitigation measures

Koch Exploration Company proposes to drill four new natural gas wells on one new well pad with associated access road and pipelines. The well numbers, locations, and related disturbances are shown in the table below. There will be 2.47 acres of disturbance per well.

Table 1.1. Project Disturbance

Well Name and Numbers	Pad Location	Road-(ft)	Road (ac)	Pipe-line-(ft)	Pip-eline (ac)	Well Pad-(ac)	Total construction Dist.(ac)	Dist, per Well(ac)
North Alger 27–42A, North Alger 27–42B, North Alger 27–42C, and North Alger 27–42D.	SESW Sec 27 T 10S R 19E	1,630ft	1.12 ac	1,700 ft	1.56 ac	7.2ac	9.88ac	2.47ac

Well Site Layout

On well pad

- Production facilities will be set on location if the wells are successfully completed for production. Facilities will consist of wellhead valves and piping, a separator and meter run that would be housed in buildings, a gas pipeline, a 400-barrel tank, gun barrel tank, two 300 barrel produced condensate tanks, four 300 barrel produced water tanks, one 300 barrel test tank, a combustor, and a triethylene glycol dehydrator.
- All condensate and water tanks would be surrounded by a berm of sufficient capacity to contain the larger of: 110 percent of the storage capacity of the largest tank in the battery or 100 percent of the largest tank in the battery plus additional freeboard for a 25–year, 24–hour rain event.
- Gas gathering lines – A 4” gas gathering line will be buried from separator to the edge of the location.

Off well Pad

- The length of the proposed pipeline is 1,700 feet x 40 feet. The proposed pipeline leaves the western edge of the well pad proceeding in a southerly direction for an approximate distance of 1,700 feet tying into an existing pipeline located in the NW 1/4 of Section 34, T10S, R19E.

- Proposed pipeline will be a laid on the surface off location.
- The length of the proposed road is 1,630 feet X 30 feet. The proposed road leaves the southern edge of the well pad proceeding in a southerly direction for an approximate distance of 1,630 feet tying into an existing road located in the NW 1/4 of Section 34, T10S, R19E.
- Ramps would be constructed where necessary to maintain vehicle access.
- All travel will be confined to existing access road right-of-way.
- All roads would meet standards appropriate to anticipated use. Bulldozers, graders, and other types of heavy equipment would be used to upgrade, construct, and maintain the roads. Construction would not be performed during wet conditions when soils are saturated. When they are available, existing roads would be used to access all well locations.
- Construction of new roads would conform to standards described in the joint BLM/USFS publication: *Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition* (Oil & Gas Gold Book) (USDI and USDA, 2007).

Source of Construction Materials

- Access roads would typically be surfaced with native material; however a road's running surface may be graveled, depending on weather conditions. If materials other than native materials found on the well pad would be needed, the Operator would obtain materials from permitted gravel pits.

Reclamation

Interim Reclamation

- Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.
- Initial reclamation would occur as soon as possible after a well is put on production and would include the portion of the project area not needed for daily production operations, including roads, well pads and pipeline routes. Cuttings would be mixed with spoils and left in the reserve pit to dry. The plastic pit liners would be cut off at the mud line and disposed of according to direction from the AO. The remaining liner would be left in the pit, which would be backfilled with stockpiled subsoil and rock and re-contoured. The Operator would assess the well pad area for slope stability and erosion features and would determine if additional dirt work or soil stabilization measures would be needed prior to seeding. Stockpiled topsoil from construction would be spread over areas to be reclaimed and broadcast seeded with the prescribed seed mixture. The seeded area would be walked down and compacted.

Final Reclamation and Abandonment

- The Operator would cut off the casing at the base of the cellar or three feet below the final graded ground level, whichever is deeper, and cap the casing with a metal plate with a minimum thickness of 0.25 inch. The cap would be welded in place with the well name and location engraved on the top. The cap would be constructed with a weep hole.
- All surface equipment, including pipelines, would be removed from the site. The surface would be recontoured to its original appearance to the extent possible. Topsoil would be distributed

above the former location to blend the appearance of the site with its natural surroundings before reseeding. Reclamation activities would be considered complete when vegetation has reached a minimum of 75 percent of background vegetation (undisturbed areas), or as approved by the AO.

Methods of Handling Waste Disposal

- Drilling fluids would consist of a water/gel mixture, with water being the main constituent. Drilling fluids and cuttings would be contained entirely within temporary above ground tanks for fluids, and cuttings pit for cuttings. .
- A closed loop system will be utilized; drill cuttings would be separated from the drilling mud and then deposited in a steel catch tank. As drilling continues, the cuttings would be removed from the tank to a cuttings storage area on the north-west corner of the well pad. When the cuttings are dried and tested they will be spread on the well pad and/or access road after drilling is complete, according to applicable regulatory requirements.
- Hydrocarbons produced during the completion work will be contained in test tanks and removed from location at a later date.
- Sewage will be handled in self-contained, chemical treated portable toilets and contents will be hauled to an approved sewage treatment facility.
- Garbage and other trash will be contained in a portable trash cage, and will be totally enclosed with small mesh wire. Cage and contents will be hauled to an approved landfill. The road and pad will be kept litter free.

Hazardous waste would not be generated in association with drilling the proposed wells. Most wastes that would result from drilling and operating the proposed wells are excluded from regulation by the Resource Conservation and Recovery Act under the exploration and production exemption in Subtitle C [40 CFR 261.4(b)(5)] and are considered solid wastes. Such wastes include those generated at the well head and through the production stream. Exempt wastes include produced water, production fluids such as drilling mud or well stimulation flow-back fluids, and soils affected by spills of these fluids.

Koch Exploration Company, LLC would develop and maintain Spill Prevention Control and Countermeasure Plans (SPCCPs) for all of the North Alger Project Area (NAPA) wells, as required by regulation. Accidental spills of oil, produced water, or other produced fluids would be cleaned up and disposed of in accordance with appropriated regulations and the SPCCP. An accidental leak or spill in excess of the reportable quantity established by 40 CF Part 117.3 would be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, Section 102(b).

Other information

- As operator, Koch Exploration Company, LLC will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BLM administered land, a Pesticide Use Proposal (PUP) shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- Completion operations will be conducted utilizing a completion/workover rig.

- Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on BLM lands after the conclusion of drilling operations or at any other time without BLM authorization.
- During construction care shall be taken to keep all fill materials between corners #2 & #3 out of the drainage area.
- All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, Environmental Assessment & Biological Assessment **DOI-BLM-UT-G010-2012-0112**, approved January 17, 2013, and any applicable Notice of Lessees. The operator is fully responsible for the actions of its sub-contractors. A complete copy of the approved “Application for Permit to Drill” and “Right-of-Way grant”, if applicable, will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.
- If the existing access road, proposed access road, and proposed pad are dry during construction, drilling, and completion activities, water will be applied to help facilitate compaction during construction and to minimize soil loss as a result of wind erosion.

B. Land Use Plan Conformance

Vernal Resource Management Plan **October, 2008**

**List applicable LUPs (for example, resource management plans; activity, project, management, or program plans; or applicable amendments thereto)*

Applicable Land Use Plan(s) Vernal Field Office (VFO) ROD/RMP, October 2008 (as maintained). The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions (as maintained):

- MIN2 (VFO ROD/RMP page). Mineral and energy resources exploration and development surface-disturbing activities will be allowed in the VPA unless precluded by other program prescriptions. The stipulation identified for surface-disturbing activities in Appendix K will generally apply to these activities
- The proposed action is also consistent with the Vernal Field Office’s ROD/RMP decisions and objectives as they relate to the management of the following resources (including but not limited to): air quality, wildlife, minerals, cultural, BLM Natural Areas and non-wilderness study area lands with wilderness characteristics.

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

List by name and date all applicable NEPA documents that cover the proposed action.

North Alger Development EA DOI-BLM-UT-G010-2012-0112 January 17, 2013

List by name and date other documentation relevant to the proposed action (e.g. biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report).

Final Biological Opinion for Koch Exploration Company's North Alger Project September 28th, 2012

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes, this effect of this proposal have been analyzed in the documents listed above.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource value?

Yes

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessments, recent endangered species listings, updated lists of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes, the North Alger Development EA examines the direct, indirect, and cumulative effects of the proposed action in detail.

5. Are there public involvement and interagency reviews associated with existing NEPA document(s) adequate for the current proposed action?

Agency	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
United States Fish & Wildlife Service (USFWS)	Information on Consultation, under Section 7 of the Endangered Species Act (16 USC 1531).	Formal consultation was conducted Under the North Alger Development EA, with respect to T&E plant and wildlife species. Payments would be made to the Recovery Implementation Program (RIP) for Endangered Fish Species in the Upper Colorado River Basin, as applicable. The USFWS concurred with the BLM's effect determinations on October 2, 2012.
Utah State Historic Preservation Office (SHPO)	Consultation for undertakings, as required by the National Historic Preservation Act (16 USC 470).	A consultation letter was sent to SHPO on February 19, 2015 recommending a "no historic properties affected" determination. We received their concurrence to our determination on February 26, 2015.
Native American consultation	Consultation as required by the American Indian Religious Freedom Act of 1978 (42 USC 1531) and NHPA (16 USC 470).	A letter was sent to interested Tribes on July 11th, 2012. Responses were received from the Hopi Tribe, the Confederated Tribes of the Goshute Reservation, and the Pueblo of

Agency	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
		Laguna. The Hopi Tribe requested to review future cultural resource inventories associated with the proposed development. No other concerns were brought forth.

E. Persons/Agencies/BLM Staff Consulted

Table 1.2. List of Preparers

Name	Role
Melissa Wardle	Natural Resource Specialist

Note

Refer to the EA/EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents and the ID team checklist for a complete list of team members that reviewed this DNA.

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirement of NEPA.

MWardle

Signature of Project Lead

Kelly buckner

Signature of NEPA Coordinator

/s/ Jerry Kenczka

Signature of the Responsible Official

July 14, 2015

Date

Note:

The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

Appendix A. Interdisciplinary Team Checklist

INTERDISCIPLINARY TEAM CHECKLIST

Project Title: Koch Proposal for 10 Gas Wells.

NEPA Log Number: DOI-BLM-UT-9100-2015-0108-DNA

File/Serial Numbers: UTU-49518

Project Leader: Melissa Wardle

DETERMINATION OF STAFF:

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for significant impact analyzed in detail in the EA; or identified in a DNA as requiring further analysis

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section C of the DNA form.

Determina- tion	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Air Quality & Greenhouse Gas Emissions	Emissions from earth-moving equipment, vehicle traffic, drilling and completion activities, separators, oil storage tanks, dehydration units, and daily tailpipe and fugitive dust emissions could adversely affect air quality. But these effects have been examined in detail under DOI-BLM-UT-G010-2012-0112-EA	Melissa Wardle	4/16/2015
NP	BLM Natural Areas	The project area does not lie in any designated BLM Natural Area following GIS review.	Melissa Wardle	4/16/2015
NP	Cultural: Archaeological Resources	Aros Archaeology conducted a Class III 100% pedestrian inventory over the project area. No cultural material was identified within the project area. A consultation letter was sent to SHPO on February 19, 2015 recommending a "no historic properties affected" determination. We received their concurrence to our determination on February 26, 2015.	Erin Goslin	4/17/2015
NP	Cultural: Native American Religious Concerns	Tribal consultation was conducted under the North Alger EA, 2012. No Traditional Cultural Properties (TCPs) are identified within the APEs. The proposed projects will not hinder access to or use of Native American religious sites.	Erin Goslin	4/17/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Designated Areas: Areas of Critical Environmental Concern	The project area does not lie in any designated Area of Critical Environmental Concern following GIS review.	Melissa Wardle	4/16/2015
NP	Designated Areas: Wild and Scenic Rivers	None present as per Vernal RMP/ROD and GIS layer review	William Civish	4/20/15
NP	Designated Areas: Wilderness Study Areas	None present as per Vernal RMP/ROD and GIS layer review	William Civish	4/20/15
NP	Environmental Justice	The proposed alternatives would not likely create disproportionately high and adverse human health impacts or environmental effects on minority or low-income populations since there are none in the project area.	Melissa Wardle	4/16/2015
NP	Farmlands (prime/unique)	All prime or unique farm lands in the Uintah Basin must be irrigated to be considered under this designation, among other factors. No irrigated lands are located in the proposed action area; therefore this resource will not be carried forward for analysis.	Melissa Wardle	4/16/2015
NP	Fuels/Fire Management	There are no past or planned fuels projects in the immediate area. The proposed reclamation activities should prevent additional hazardous fuels.	Melissa Wardle	4/16/2015
NI	Geology/Minerals/Energy Production	<p>Gilsonite veins are present in Sec 33 and 34. Encounters with gilsonite during any surface or drilling operation must be reported to the BLM Vernal Field Office. Please provide location and depth encountered.</p> <p>Natural gas, oil, gilsonite, oil shale, and tar sand are the only mineral resources that could be impacted by the project. Production of natural gas or oil would deplete reserves, but the proposed project allows for the recovery of natural gas and oil per 43 CFR 3162.1(a), under the existing Federal lease. Compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations" will assure that the project will not adversely affect gilsonite, oil shale, or tar sand deposits. Due to the state-of-the-art drilling and well completion techniques, the possibility of adverse degradation of tar sand or oil shale deposits by the proposed action will be negligible.</p> <p>Well completion must be accomplished in compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations". These guidelines specify the following: ... <i>proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of</i></p>	Betty Gamber	3/12/2015

Determina- tion	Resource/Issue	Rationale for Determination	Signature	Date
		<i>minerals. Any isolating medium other than cement shall receive approval prior to use.</i> ³		
NI	Invasive, Non-Native Species (EO 13112)	Disturbance to the soil and vegetation. Creation of suitable habitat for invasive plants	Melissa Wardle	4/16/2015
NI	Lands/Access	All new construction is within the North Algers Unit, which was analyzed under DOI-BLM-UT-G010-2012-0112	Melissa Wardle	4/20/2015
NP	Lands with Wilderness Characteristics (LWC)	None present as per Vernal RMP/ROD and GIS layer review	William Civish	4/20/15
NC	Livestock Grazing & Rangeland Health Standards	There are no additional impacts from the proposed project to the livestock operation than those that were analyzed in the previous NEPA document. No new or previously unknown information has been made available related to the previous environmental analysis.	Dusty Carpenter	4/30/15
NI	Paleontology	No fossils were found within the project area.	Betty Gamber	3/12/2015
NI	Plants: BLM Sensitive	No BLM-sensitive plants were found during plant surveys conducted June, 2014	Jessi Brunson	6/1/2015
NC	Plants: Threatened, Endangered, Proposed, or Candidate	The project is in an area that may contain habitat for clay reed-mustard (<i>Schoenocrambe argillacea</i>) and Uinta Basin hookless cactus (<i>Sclerocactus wetlandicus</i>). No individuals were found during surveys conducted June 2014.	Jessi Brunson	6/1/2015
NP	Plants: Wetland/Riparian	Riparian habitat is not inventoried or known within the project area and the development would not be expected to negatively impact riparian of the Green River indirectly.	Melissa Wardle	4/16/2015
NI	Recreation	There are no recreation sites in this project area. Recreation will not be effected by this project.	William Civish	4/20/15
NI	Socio-Economics	Effects on social and economic values would be minimal and would not require further analysis due to the small-scale nature of the action when compared to the larger economy in the area.	Melissa Wardle	4/16/2015
NI	Visual Resources	This project area is in Class IV VRM> The objective Class IV is to provide for management activities that require major modifications to the existing character of the landscape. The level of change to the landscape can be high. The management activities may dominate the view and may be the major focus of the viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repetition of the basic visual elements of form, line, color and texture.	William Civish	4/20/15

Determina- tion	Resource/Issue	Rationale for Determination	Signature	Date
NI	Wastes (hazardous/solid)	<p>Hazardous Waste: No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the project. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the project.</p> <p>Solid Wastes: Trash would be confined in a covered container and hauled to an approved landfill. Burning of waste or oil would not be done. Human waste would be contained and be disposed of at an approved sewage treatment facility.</p>	Melissa Wardle	4/16/2015
NP	Water: Floodplains	The only HUD inventoried flood plain is located within the west edge of Section 28 of the project area. However all ephemeral drainages have some degree of non-HUD inventoried flood plains. The proponent should identify how well pads, roads and pipeline would impact flood plains and how the proposed project relates to Executive Order # 11988 for Floodplain Management. Simple analysis of the issue.	Melissa Wardle	4/16/2015
NI	Water Resources Quality (drinking /surface /ground)	<p>Surface: Analysis to quantify soil erosion and potential chemical spill issues due vehicle lubricants and fuels as well as industrial chemicals for the natural gas development should be described. Acreage of disturbance and analysis of erosion from pads, roads and pipeline development would be different.</p> <p>Groundwater: Compliance with “Onshore Oil and Gas Order No. 1, will assure that the project will not adversely affect groundwater quality. Due to the state-of-the-art drilling and wells completion techniques, the possibility of adverse degradation of groundwater quality or prospectively valuable mineral deposits by the proposed action will be negligible</p>	<p>Melissa Wardle</p> <p>Betty Gamber</p>	<p>4/16/2015</p> <p>3/12/2015</p>
NI	Water: Hydrologic Conditions (stormwater)	The proposed project will alter surface water flow patterns with the development of the infrastructure of the project. Potential stormwater may be an issue due to the development however the 2005 Energy Policy Act exempts energy development from Section 402 of the Clean Water Act. Analysis should be detailed enough to explain surface water flow changes and storm water requirements.	Melissa Wardle	4/16/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Water: Surface Water Quality	Surface: Analysis to quantify soil erosion and potential chemical spill issues due vehicle lubricants and fuels as well as industrial chemicals for the natural gas development should be described. Acreage of disturbance and analysis of erosion from pads, roads and pipeline development would be different	Melissa Wardle	4/16/2015
NP	Water: Waters of the U.S.	Although there are no perennial waters within the project area some steep drainages, most specifically Kings Canyon, can be considered by the U.S. Corp of Engineers as U.S. waters. These drainages should be quantified for potential impacts by the project. Direct disturbance acres and possible soil erosion that would enter the drainages. Waters of the U.S. are addressed with surface water quality.	Melissa Wardle	4/16/2015
NC	Wild Horses	There are no additional impacts from the proposed project to the horses located in the Hill Creek HA, than those that were analyzed in the previous NEPA document. No new or previously unknown information has been made available related to the previous environmental analysis.	Dusty Carpenter	4/30/2015
NC	Wildlife: Migratory Birds (including raptors)	Migratory bird foraging and nesting habitat would be degraded by the proposed action. If construction occurs during the spring and early summer months, nests/eggs and/or young could be destroyed.	Daniel Emmett	4/27/2015
NC	Wildlife: Non-USFWS Designated	The project area provides habitat for white-tailed prairie dogs. Conservation Agreement fish including bluehead sucker (<i>Catostomus discobolus</i>), flannelmouth sucker (<i>Catostomus latipinnis</i>), and roundtail chub (<i>Gila robusta</i>) will be affected by water depletions, Raptors are addressed under the Migratory Bird Section.	Daniel Emmett	4/27/2015
NC	Wildlife: Threatened, Endangered, Proposed or Candidate	There are no known TEC species present. Water depletions would affect Endangered Colorado River Fish: <i>Gila elegans</i> , <i>Ptychocheilus lucius</i> , <i>Gila cypha</i> , and <i>Xyrauchen texanus</i> .	Daniel Emmett	4/27/2015
NP	Woodlands/Forestry	Not present in project area as per GIS review.	David Palmer	2/6/2012

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator	Kelly Buckner		
Authorized Officer	/s/ Jerry Kenczka	July 14, 2015	

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Appendix B. Conditions of Approval

Air Quality:

- The Operator will utilize drilling rig engines of Tier 2 quality or better.
- The Operator will install dehydrator volatile organic compound (VOC) emission controls to attain + 90 percent efficiency.
- If needed, the Operator will install stationary internal combustion engines that meet an emissions standard of 2 grams/BHP-hour for engines less than 300 horsepower (HP) and 1 gram/BHP-hour (base horsepower-hour) for engines greater than or equal to 300 HP. *Note: No stationary internal combustion engines are proposed for this project.*
- The Operator will install 95 percent efficient VOC emission controls on production tanks with the potential to emit more than 6 tons per year (TPY) VOCs, as required by NSPS Subpart OOOO (EPA, 2011f-as cited in the EA).
- The Operator will utilize low-bleed (or equivalent device that does not exceed the EPA low-bleed emissions thresholds of 6 scfh) pneumatic devices at all new and existing production facilities (EPA, 2011f-as cited in the EA).
- The Operator will establish a thief hatch/Enardo inspection and replacement program to minimize tank losses.
- The Operator will utilize telemetry to minimize well visits.
- The Operator will install solar-powered chemical pumps on production facilities.

The Operator will employ measures to mitigate any potential exceedance of the 1-hour NO₂ standard during drilling operations by employing effective public health buffer zones out to 200 meters (m) from the nearest emission source. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Additionally, the applicant commits to developing a project-specific adaptive management strategy, to be informed by periodic emission inventory updates. Implementation of this strategy and associated application of “enhanced” ozone mitigation measures would be required once the proposed project is initiated if:

- 1) USEPA designates the area “nonattainment” for ozone;
- 2) There is a monitored ozone standard exceedance;
- 3) The ARMS modeling shows that additional mitigation is needed to prevent future ozone exceedances; or
- 4) The ARMS group establishes industry-wide mitigation requirements through ongoing modeling.

If implementation of this adaptive management strategy is triggered, the applicant commits to working with the BLM to analyze project-specific “enhanced” mitigation measures and employ

them within 1 year. The measures to be considered could include, but would not be limited to, the following:

- Reducing the total number of drill rigs.
- Installing Tier 4 or better drill rig engines.
- Seasonally reducing or ceasing drilling during specified periods.
- Using only lower-emitting drill and completion rig engines during specified time periods.
- Using natural gas-fired drill and completion rig engines.
- Replacing internal combustion engines with gas turbines for natural gas compression.
- Using electric drill rig or compression engines.
- Centralizing gathering facilities.
- Limiting blow-downs or restricting them during specified periods.
- Installing plunger lift systems with smart automation.
- Employing a monthly Forward Looking Infrared, or FLIR, monitoring program to reduce VOCs.
- Enhancing a direct inspection and maintenance program.
- Employing tank load out vapor recovery.
- Employing enhanced VOC emission controls with 95 percent control efficiency on additional production equipment having a potential to emit of greater than 5 tons per year.
- In addition to the commitments discussed above, the applicant commits to complying with applicable air pollution control rules and regulations.

Air quality issues are being addressed on a Utah-wide basis through the Utah Air Resource Technical Advisory Group (UTAG) and the BLM's ARMS. The actions outlined below have been designed to address ozone levels possibly associated with oil and gas operations in the Uinta Basin. The actions consist of the following elements:

- Refine air quality modeling predictions;
- Develop a Uinta Basin ozone action plan; and
- Implement a regional ozone action plan.

The first two elements of this strategy are being implemented by the BLM and other agency stakeholders, independent of the decision to be made regarding further development in the Uinta Basin. Regional operators may participate in these initial planning steps, thereby having the opportunity to contribute to the outcome of the process. The third element would require specific action by the applicant and other oil and gas operators in the Uinta Basin following the approval of the Decision Record. All three elements are described in more detail in the following paragraphs.

Cultural Resources:

- If any historic or archaeological resources are found during operations, all operations that could further disturb such materials will be suspended, and the AO will be contacted for direction.

Livestock Grazing:

- If existing range improvements were to be damaged by project operations, the Operator will contact the AO immediately for direction.
- Stock ponds in the NAPA would be avoided such that they would not be damaged by project operations. If existing stock ponds were to be functionally impaired by sedimentation resulting from project operations, the Operator will contact the AO immediately for direction and will take measures to restore the functionality of affected range improvements.

Paleontological Resources:

- If any paleontological resources are found during operations, all operations that could further disturb such materials will be suspended, and the AO will be contacted for direction.

Soils and Water:

- Stormwater flow and sedimentation will be controlled with the implementation of Gold Book BMPs and the Operator's Post-construction Stormwater plan (SWPPP) (See Appendix E of the EA).

Threatened, Endangered, and Candidate Species:

- Re-initiation of section 7 consultation with the USFWS will be sought immediately if any loss of Threatened or Endangered species is caused as a result of project activities

Vegetation:

- The Operator would implement site-specific reclamation activities based on a Reclamation Plan (Appendix D) and the Green River District Reclamation Guidelines
- The Operator would initiate an active weed management program in its NAPA leases in the spring of 2012. The Operator would use herbicides to control infestations of weeds, using procedures described in a weed control plan.
- All herbicide treatments will follow the guidance of the Record of Decision for the BLM Vegetation Treatments Using Herbicides (BLM, 2007b) and any future local Weed Management direction received from the FO to ensure the use of safeguards with respect to approved chemicals, application rates, and BMPs.
- Weed-free mulching or other means, as determined appropriate during the onsite or reclamation inspections, will be used.

Re-initiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants of Threatened or Endangered species is caused as a result of project activities.